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**west virginia** department of environmental protection

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Office of Oil and Gas  
601 57th Street SE  
Charleston, WV 25304  
(304) 926-0450  
(304) 926-0452 fax

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
[www.dep.wv.gov](http://www.dep.wv.gov)

December 09, 2013

**WELL WORK PERMIT**

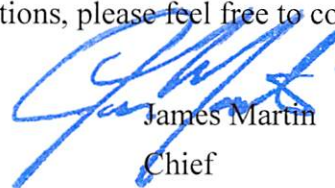
**Re-Work**

This permit, API Well Number: 47-3906348, issued to RAVEN RIDGE ENERGY, is evidence of permission granted to perform the specified well work at the location described on the attached pages and located on the attached plat, subject to the provisions of Chapter 22 of the West Virginia Code of 1931, as amended, and all rules and regulations promulgated thereunder, and to all conditions and provisions outlined in the pages attached hereto. Notification shall be given by the operator to the Oil and Gas Inspector at least 24 hours prior to the construction of roads, locations, and/or pits for any permitted work. In addition, the well operator shall notify the same inspector 24 hours before any actual well work is commenced and prior to running and cementing casing. Spills or emergency discharges must be promptly reported by the operator to 1-800-642-3074 and to the Oil and Gas inspector.

Please be advised that form WR-35, Well Operators Report of Well Work is to be submitted to this office within 90 days completion of permitted well work, as should form WR-34 Discharge Monitoring Report within 30 days of discharge of pits, if applicable. Failure to abide by all statutory and regulatory provisions governing all duties and operations hereunder may result in suspension or revocation of this permit and, in addition, may result in civil and/or criminal penalties being imposed upon the operators.

In addition to the applicable requirements of this permit, and the statutes and rules governing oil and gas activity in WV, this permit may contain specific conditions which must be followed. Permit conditions are attached to this cover letter.

Per 35CSR-4-5.2.g this permit will expire in two (2) years from the issue date unless permitted well work is commenced. If there are any questions, please feel free to contact me at (304) 926-0499 ext. 1654.



James Martin  
Chief

Operator's Well No: OSBORNE 2A  
Farm Name: BODKINS, DANIEL & LAURA  
**API Well Number: 47-3906348**  
**Permit Type: Re-Work**  
Date Issued: 12/09/2013

**Promoting a healthy environment.**

# PERMIT CONDITIONS

West Virginia Code § 22-6-11 allows the Office of Oil and Gas to place specific conditions upon this permit. Permit conditions have the same effect as law. Failure to adhere to the specified permit conditions may result in enforcement action.

## CONDITIONS

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1. If the operator encounters an unanticipated void, or an anticipated void at an unanticipated depth, the operator shall notify the inspector within 24 hours. Modifications to the casing program may be necessary to comply with W. Va. Code § 22-6-20, which requires drilling to a minimum depth of thirty feet below the bottom of the void, and installing a minimum of twenty (20) feet of casing. Under no circumstance should the operator drill more than fifty (50) feet below the bottom of the void or install less than twenty (20) feet of casing below the bottom of the void.
2. Pursuant to 35 CSR § 4-19.1.a, at the request of the surface owner all water wells or springs within 1000 feet of the proposed well that are actually utilized for human consumption, domestic animals or other general use shall be sampled and analyzed.
3. Pursuant to 35 CSR § 4-19.1.c, if the operator is unable to sample and analyze any water well or spring within one thousand (1,000) feet of the permitted well location, the Office of Oil and Gas requires the operator to sample, at a minimum, one water well or spring located between one thousand (1,000) feet and two thousand (2,000) feet of the permitted well location.
4. All pits must be lined with a minimum of 20 mil thickness synthetic liner.
5. In the event of an accident or explosion causing loss of life or serious personal injury in or about the well or while working on the well, the well operator or its contractor shall give notice, stating the particulars of the accident or explosion, to the oil and gas inspector and the Chief within twenty-four (24) hours.
6. During the surface casing and cementing process, in the event cement does not return to the surface, or any other casing string that is permitted to circulate cement to the surface and does not return to the surface, the oil and gas inspector shall be notified within twenty-four (24) hours.
7. Well work activities shall not constitute a hazard to the safety of persons.
8. This permit is being conditioned to address the possibility of flooding in the area of this well. Any tanks stored on this location must be securely anchored in cement to prevent the loss of tanks should a flood occur. In addition, cages must be placed around the well head to prevent debris from damaging the well head.

3906348 R  
~~3906348 R~~

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
WELL WORK PERMIT APPLICATION

1) Well Operator: RAVEN RIDGE ENERGY, LLC 494485865 KANAWHA -39 BIG SANDY - 01 CLENDENIN - 299  
Operator ID County District Quadrangle

2) Operator's Well Number: OSBORNE 2A 3) Elevation: 846'

4) Well Type: (a) Oil X or Gas X  
(b) If Gas: Production X / Underground Storage \_\_\_\_\_  
Deep \_\_\_\_\_ / Shallow X

5) Proposed Target Formation(s): WEIR Proposed Target Depth: 2,100'  
6) Proposed Total Depth: 2,400' Feet Formation at Proposed Total Depth: 2,000' - 2,400'  
7) Approximate fresh water strata depths: 150'  
8) Approximate salt water depths: 1,100' - 1,600'

9) Approximate coal seam depths: NO COAL LISTED ON TITLE

10) Approximate void depths,(coal, Karst, other): NONE

11) Does land contain coal seams tributary to active mine? NO

12) Describe proposed well work and fracturing methods in detail (attach additional sheets if needed)  
RUN 4 1/2" CASING, STIMULATE AND FRAC (ACID & WATER) AN EXISTING WELL

13) CASING AND TUBING PROGRAM

TYPE	SPECIFICATIONS			FOOTAGE	INTERVALS	CEMENT
	Size	Grade	Weight per ft	For Drilling	Left in Well	Fill -up (Cu. Ft.)
Conductor						
Fresh Water	9 5/8"	LS	17LBS	350'	EXISTING	CTS
Coal						
Intermediate	7"	J55	23LBS	1,850'	EXISTING	CTS
Production	4 1/2"	J55	10.5LBS	2200'	2200'	150 Sacks
Tubing						
Liners						

Packers: Kind: \_\_\_\_\_  
Sizes: \_\_\_\_\_  
Depths Set \_\_\_\_\_

Received  
NOV 25 2013  
Office of Oil and Gas  
WV Dept. of Environmental Protection



3906348 R

WW-2A  
(Rev. 6-07)

1). Date: OCTOBER 4, 2013  
2.) Operator's Well Number CSBORNE 2A  
State          County          Permit           
3.) API Well No.: 47- 39 - 6348

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION, OFFICE OF OIL AND GAS  
NOTICE AND APPLICATION FOR A WELL WORK PERMIT

4) Surface Owner(s) to be served:  
(a) Name DANIEL AND LAURA BODKINS ✓ Address P.O. BOX 847  
CLENDENIN, WV 25045  
(b) Name                                  Address                                   
(c) Name                                  Address                                   
6) Inspector TERRY URBAN (Signature) (c) Coal Operator  
Address PO BOX 1207 Name                                   
CLENDENIN, WV 25045 Address                                   
Telephone (304) 549-5915

TO THE PERSONS NAMED ABOVE TAKE NOTICE THAT:

OR Included is the lease or leases or other continuing contract or contracts by which I hold the right to extract oil and gas

OR Included is the information required by Chapter 22, Article 6, Section 8(d) of the Code of West Virginia (see page 2)

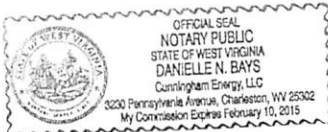
I certify that as required under Chapter 22-6 of the West Virginia Code I have served copies of this notice and application, a location plat, and accompanying documents pages 1 through          on the above named parties by:

         Personal Service (Affidavit attached)  
  x   Certified Mail (Postmarked postal receipt attached)  
         Publication (Notice of Publication attached)

I have read and understand Chapter 22-6 and 35 CSR 4, and I agree to the terms and conditions of any permit issued under this application.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.



Well Operator RAVEN RIDGE ENERGY, LLC  
By: RYAN CUNNINGHAM  
Its: OFFICER  
Address 3230 PENNSYLVANIA AVENUE  
CHARLESTON, WV 25302  
Telephone (304) 344-9291

Subscribed and sworn before me this 4th day of OCTOBER, 2013

Danielle N. Bays Notary Public  
My Commission Expires 2/10/2015  
Oil and Gas Privacy Notice

The Office of Oil and Gas processes your personal information, such as name, address and phone number, as a part of our regulatory duties. Your personal information may be disclosed to other State agencies or third parties in the normal course of business or as needed to comply with statutory or regulatory requirements, including Freedom of Information Act requests. Our office will appropriately secure your personal information. If you have any questions about our use of your personal information, please contact DEP's Chief Privacy Officer at [depprivacyofficer@wv.gov](mailto:depprivacyofficer@wv.gov)

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WV Dept. of Environmental Protection

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7012 2920 0001 2086 1768

U.S. Postal Service <sup>TM</sup>		
CERTIFIED MAIL <sup>TM</sup> RECEIPT		
(Domestic Mail Only; No Insurance Coverage Provided)		
For delivery information visit our website at <a href="http://www.usps.com">www.usps.com</a>		
CLDENENIN WV 25045		
Postage	\$ 1.72	0701
Certified Fee	\$3.10	28
Return Receipt Fee (Endorsement Required)	\$2.55	
Restricted Delivery Fee (Endorsement Required)	\$0.00	
Total Postage & Fees	\$ 47.37	10/09/2013
Sent To		
Street, Apt. No., or PO Box No.		
City, State, ZIP+4		
Daniel and Laura Bodkins P.O. Box 847 Clendenin, WV 25045		
PS Form 3800, August 2009		
See Reverse for Instructions		

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NOV 25 2013  
Office of Oil and Gas  
WV Dept. of Environmental Protection

2906348 R

**INFORMATION SUPPLIED UNDER WEST VIRGINIA CODE  
Chapter 22, Article 6, Section 8(d)  
IN LIEU OF FILING LEASE(S) AND OTHER CONTINUING CONTRACT(S)**

Under the oath required to make the verification on page 1 of this Notice and Application, I depose and say that I am the person who signed the Notice and Application for the Applicant, and that -

- (1) the tract of land is the same tract described in this Application, partly or wholly depicted in the accompanying plat, and described in the Construction and Reclamation Plan;
- (2) the parties and recordation data (if recorded) for lease(s) or other continuing contract(s) by which the Applicant claims the right to extract, produce or market the oil or gas are as follows:

Grantor, Lessor, etc.	Grantee, Lessee, etc.	Royalty	Book/Page
ALVIN ENGELKE, AGENT	CUNNINGHAM ENERGY, LLC	1/2 OF 1/8	260/431
LINDA OSBORNE	CUNNINGHAM ENERGY, LLC	1/4 OF 1/8	260/775
EMMA JEAN LADD	CUNNINGHAM ENERGY, LLC	1/4 OF 1/8	260/80
	SEE ATTACHED AGREEMENT		

**Acknowledgement of Possible Permitting/Approval  
In Addition to the Office of Oil and Gas**

The permit applicant for the proposed well work addressed in this application hereby acknowledges the possibility of the need for permits and/or approvals from local, state, or federal entities in addition to the DEP, Office of Oil and Gas, including but not limited to the following:

- WV Division of Water and Waste Management
- WV Division of Natural Resources
- WV Division of Highways
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County Floodplain Coordinator

The applicant further acknowledges that any Office of Oil and Gas permit in no way overrides, replaces, or nullifies the need for other permits/approvals that may be necessary and further affirms that all needed permits/approvals should be acquired from the appropriate authority before the affected activity is initiated.

Well Operator: RAVEN RIDGE ENERGY, LLC  
By: Its: OFFICER

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NOV 25 2013  
Office of Oil and Gas  
WV Dept. of Environmental Protection

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AGREEMENT

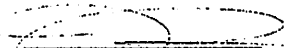
This agreement is made and entered into this 16<sup>th</sup> day of February, 2012 by and between Cunningham Energy, LLC, a West Virginia limited liability company and Raven Ridge Energy, LLC, a West Virginia limited liability company.

This agreement gives permission to Raven Ridge Energy to operate any leases (owned property or otherwise leased) maintained by Cunningham Energy, LLC for any and all past, current or future projects to be developed by or for Cunningham Energy, LLC.

CUNNINGHAM ENERGY, LLC

  
Owner

RAVEN RIDGE ENERGY

  
Officer

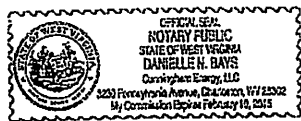
RECEIVED  
Office of Environmental Protection

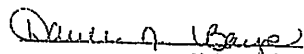
MAR 13 2012

West Virginia  
Environmental Protection

State of West Virginia  
County of Kanawha

The foregoing instrument was acknowledged before me this 16<sup>th</sup> day of February, 2012 by Ryan E. M. Cunningham, Officer of Raven Ridge Energy, LLC., a West Virginia Limited Liability Company, on behalf of the company.

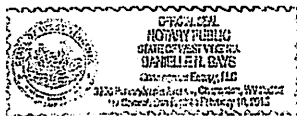


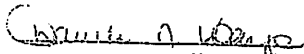
  
Notary Public

2/10/2015  
My Commission Expires

State of West Virginia  
County of Kanawha

The foregoing instrument was acknowledged before me this 16<sup>th</sup> day of February, 2012 by Ryan E. M. Cunningham, Owner of Cunningham Energy, LLC., a West Virginia Limited Liability Company, on behalf of the company.



  
Notary Public

2/10/2015  
My Commission Expires

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NOV 25 2013  
Office of Oil and Gas  
WV Dept. of Environmental Protection

3906348R

STATE OF WEST VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS

FLUIDS/ CUTTINGS DISPOSAL & RECLAMATION PLAN

Operator Name RAVEN RIDGE ENERGY, LLC OP Code 494485865

Watershed (HUC 10) SANDY BRANCH OF SANDY CREEK Quadrangle CLENDENIN

Elevation 948' County KANAWHA District BIG SANDY

Do you anticipate using more than 5,000 bbls of water to complete the proposed well work? Yes \_\_\_\_\_ No X

Will a pit be used for drill cuttings? Yes \_\_\_\_\_ No X

If so, please describe anticipated pit waste: \_\_\_\_\_

Will a synthetic liner be used in the pit? Yes X No \_\_\_\_\_ If so, what ml.? 30 mil.

Proposed Disposal Method For Treated Pit Wastes:

- ☒ Land Application
- ☐ Underground Injection ( UIC Permit Number \_\_\_\_\_ )
- ☐ Reuse (at API Number \_\_\_\_\_ )
- ☐ Off Site Disposal (Supply form WW-9 for disposal location)
- ☐ Other (Explain \_\_\_\_\_ )

Will closed loop system be used? N/A

Drilling medium anticipated for this well? Air, freshwater, oil based, etc. AIR, FRESH WATER

-If oil based, what type? Synthetic, petroleum, etc. \_\_\_\_\_

Additives to be used in drilling medium? SOAP

Drill cuttings disposal method? Leave in pit, landfill, removed offsite, etc. LANDFILL

-If left in pit and plan to solidify what medium will be used? (cement, lime, sawdust) LIME

-Landfill or offsite name/permit number? CHARLESTON LANDFILL

I certify that I understand and agree to the terms and conditions of the GENERAL WATER POLLUTION PERMIT issued on August 1, 2005, by the Office of Oil and Gas of the West Virginia Department of Environmental Protection. I understand that the provisions of the permit are enforceable by law. Violations of any term or condition of the general permit and/or other applicable law or regulation can lead to enforcement action.

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this application form and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Company Official Signature \_\_\_\_\_

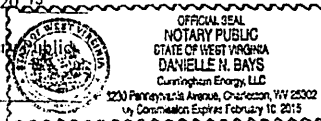
Company Official (Typed Name) RYAN E. M. CUNNINGHAM

Company Official Title OFFICER

Subscribed and sworn before me this 4th day of OCTOBER, 20 13

My commission expires 02/10/2015

Notary



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Office of Oil and Gas  
WV Dept. of Environmental Protection



3906348R

Form WW-9

Operator's Well No. OSBORNE 2A

Proposed Revegetation Treatment: Acres Disturbed 2 Prevegetation pH         

Lime 3 Tons/acre or to correct to pH 6.5

Fertilizer (10-20-20 or equivalent) 1/3 TON lbs/acre (500 lbs minimum)

Mulch HAY 2 Tons/acre

Seed Mixtures

Seed Type	Area I lbs/acre
KY31	40
ALSIKE CLOVER	5
ANNUAL RYE	15

Seed Type	Area II lbs/acre
ORCHARD GRASS	15
ALSIKE CLOVER	5

Attach:

Drawing(s) of road, location, pit and proposed area for land application.

Photocopied section of involved 7.5' topographic sheet.

Plan Approved by: *[Signature]*

Comments:           
          
          
          
          
          
        

Title: *T. S. P. C. H. D. 11/6/13*

Date: 10-4-13

Field Reviewed?

☒ Yes

☐ No

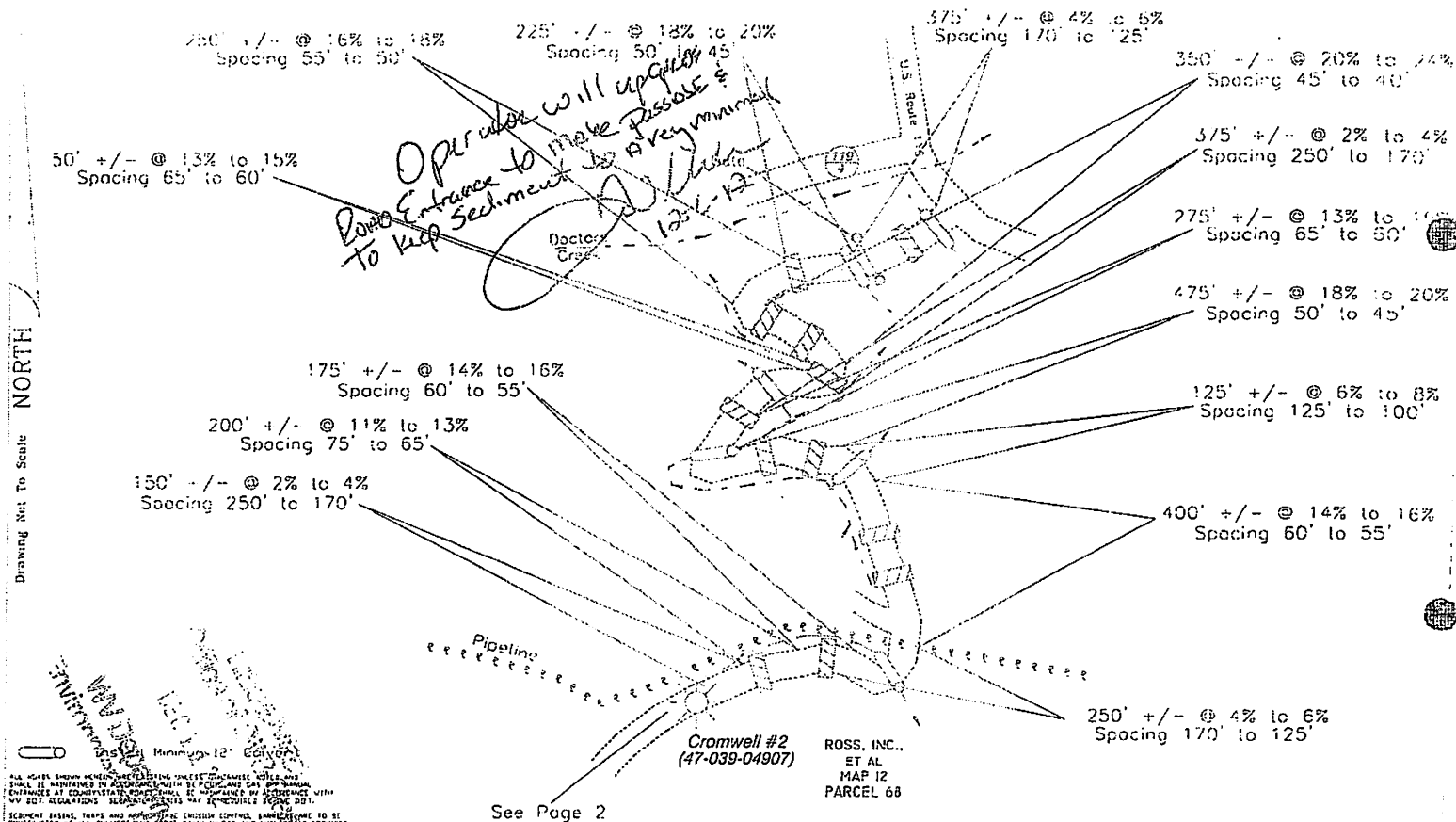
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WV Dept. of Environmental Protection

## Form W-9

Page 1 of 3



See Page 2

Cromwell #2  
(47-039-04907)

ROSS, INC.  
ET AL  
MAP 12  
PARCEL 68

250' +/- @ 4% to 6%  
Spacing 170' to 125'

## HUPP Surveying & Mapping

Drafted BY:

Date Drafted:

Job Number.

P.O. BOX 647 GRANTSVILLE, WY 28147

53

11/28/12

W20122143

[P] (304)354-7035 E-Mail: happy@comcast.net

Office of Oil and Gas  
WV Dept. of Environmental Protection

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2013

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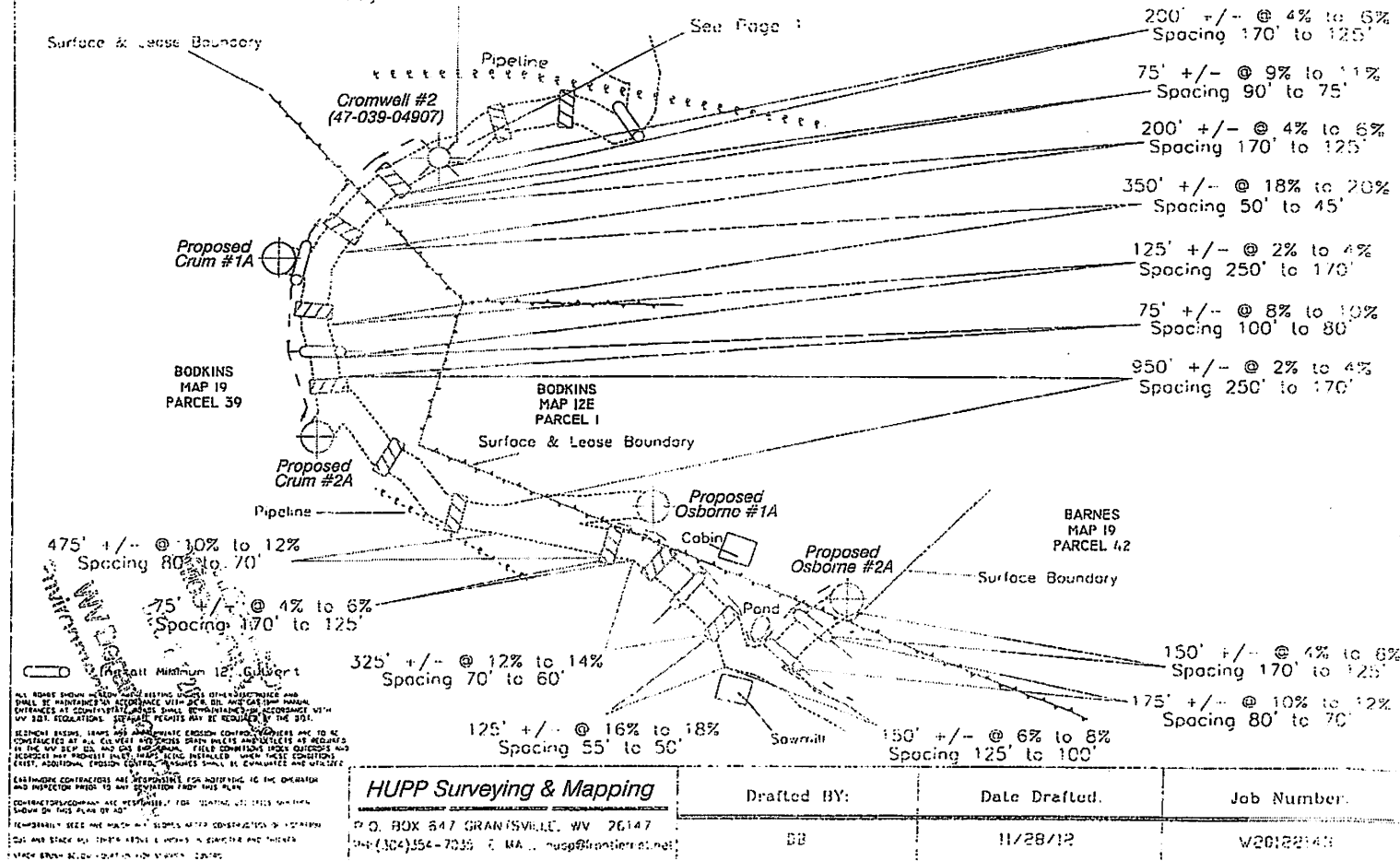
# RAVEN RIDGE ENERGY, LLC. Osborne #2A

Form W-9

Page 2 of 3

ROSS, INC.,  
ET AL  
MAP 12  
PARCEL 68

Roads Existing to here.  
Begin New Construction.



NORTH  
Drawing Not To Scale

3906348R

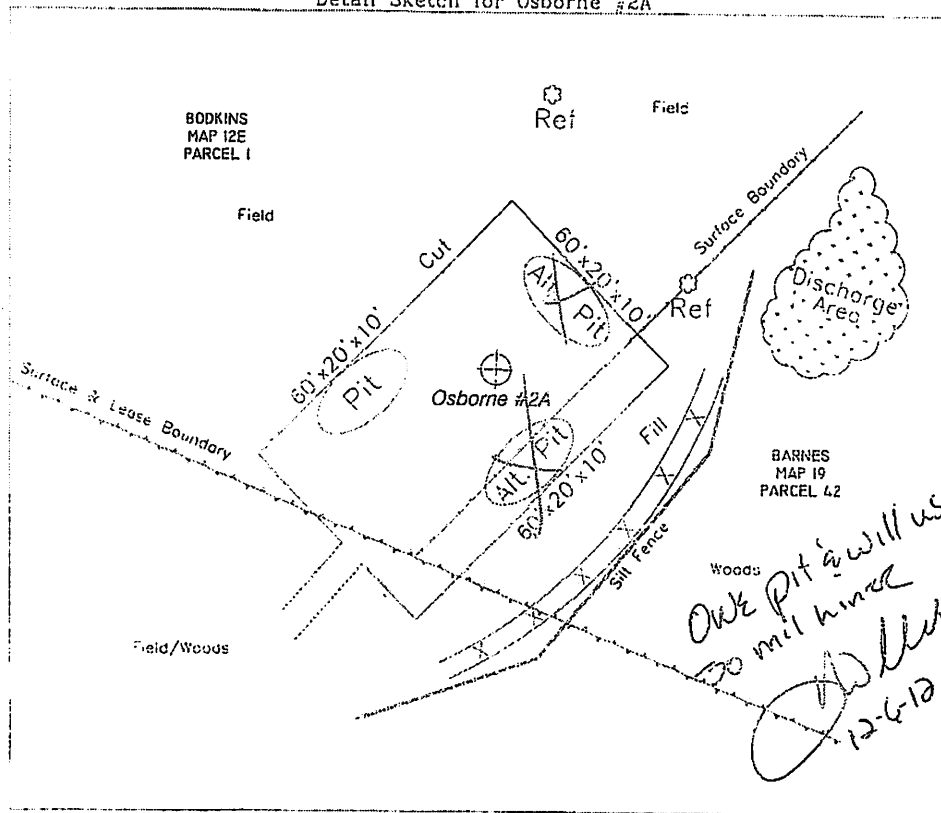
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Form W-9

# RAVEN RIDGE ENERGY, LLC. Osborne #2A

Page 3 of 3

Detail Sketch for Osborne #2A



Install Minimum 12" Culvert

ALL ROADS SHOWN HEREON ARE EXISTING UNLESS OTHERWISE NOTED AND SHALL BE MAINTAINED IN ACCORDANCE WITH DEP OIL AND GAS HUP MANUAL ENTRANCES AT COUNTY/STATE ROADS SHALL BE MAINTAINED IN ACCORDANCE WITH WV DOT REGULATIONS. SEPARATE PERMITS MAY BE REQUIRED BY THE DOT.

SEDIMENT BASINS, TRAPS AND APPROPRIATE EROSION CONTROL BARRIERS ARE TO BE CONSTRUCTED AT ALL CULVERT AND CROSS DRAIN INLETS AND OUTLETS AS REQUIRED IN THE WV DEP OIL AND GAS HUP MANUAL. FIELD CONDITIONS (ROCK OUTCROPS AND BEDROCK) MAY PROHIBIT INLET TRAPS BEING INSTALLED. WHEN THESE CONDITIONS EXIST, ADDITIONAL EROSION CONTROL MEASURES SHALL BE EVALUATED AND UTILIZED.

EARTHWORK CONTRACTORS ARE RESPONSIBLE FOR NOTIFYING THE OPERATOR AND INSPECTOR PRIOR TO ANY DEVIATION FROM THIS PLAN.

CONTRACTORS/COMPANY ARE RESPONSIBLE FOR LOCATING UTILITIES WHETHER SHOWN ON THIS PLAN OR NOT.

TEMPORARILY SEED AND MULCH ALL SLOPES AFTER CONSTRUCTION OF LOCATION.

CUT AND STACK ALL TIMBER ABOVE 6-INCHES IN DIAMETER AND THICKER. STACK BRUSH BELOW LOCATION FOR SEDIMENT CONTROL.

HUPP Surveying & Mapping

P.O. BOX 647 GRANTSVILLE, WV 26147  
P: (304) 354-7035 E-MAIL: hupp@frontiernet.net

Drafted BY:

DB

Date Drafted:

11/28/12

Job Number:

W20122143

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NOV 25 2013

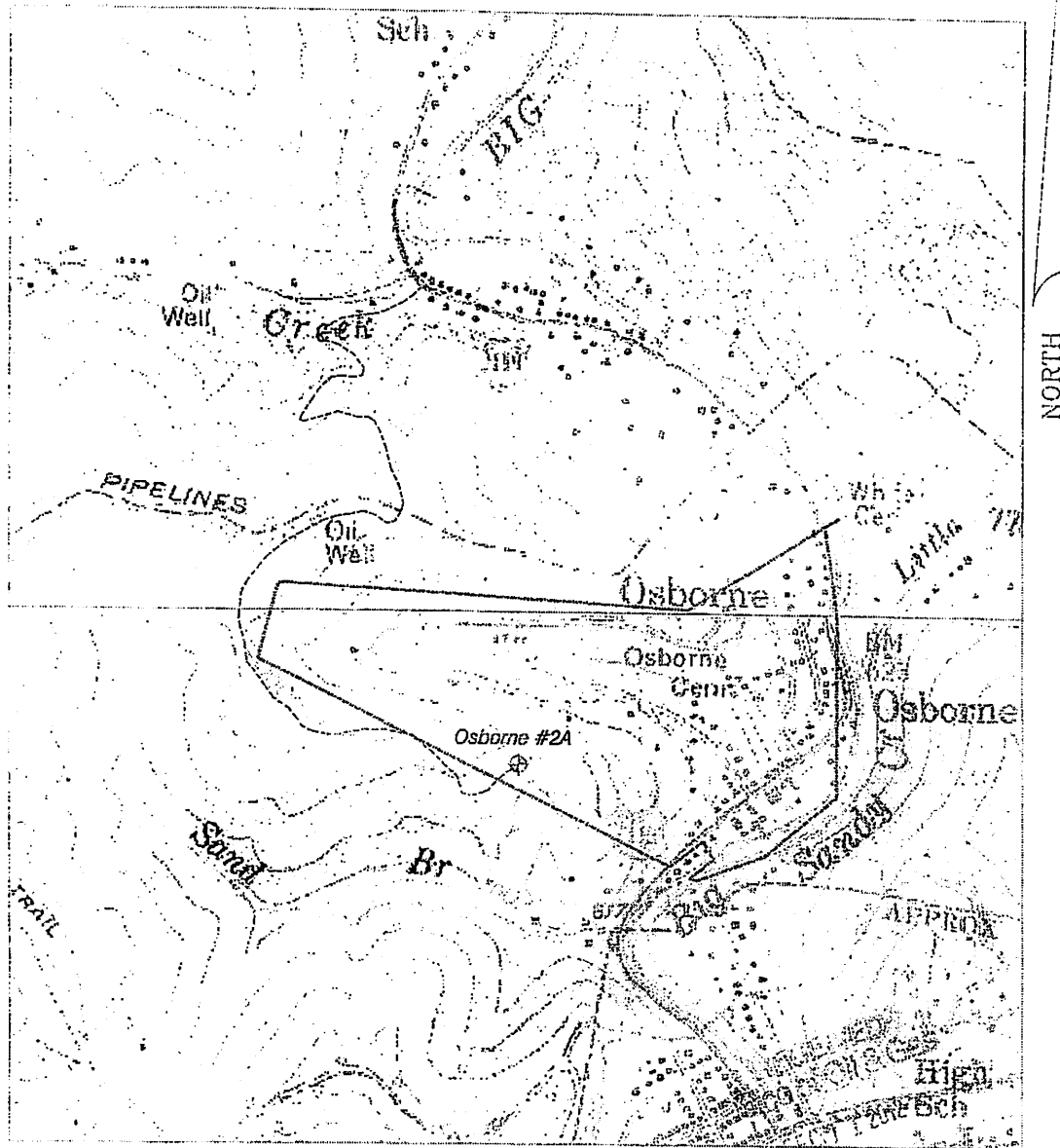
Office of Oil and Gas  
WV Dept. of Environmental Protection

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Form W-9

# RAVEN RIDGE ENERGY, LLC. OSBORNE #2A

Page 1 of 1



## HUPP Surveying & Mapping

P.O. BOX 547 GRANTSVILLE, WV 26147  
PH: (304) 354-7035 E-MAIL: hupp@frontiernet.net

1" = 1000'  
Clendenin Quad

Raven Ridge Energy, LLC.  
3230 Pennsylvania Ave.  
Charleston, WV 25302

Received

NOV 25 2013

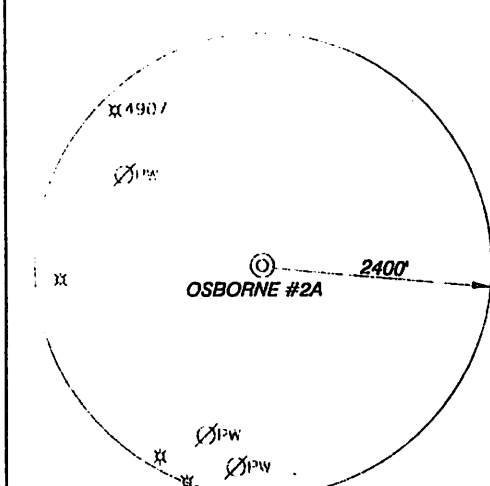
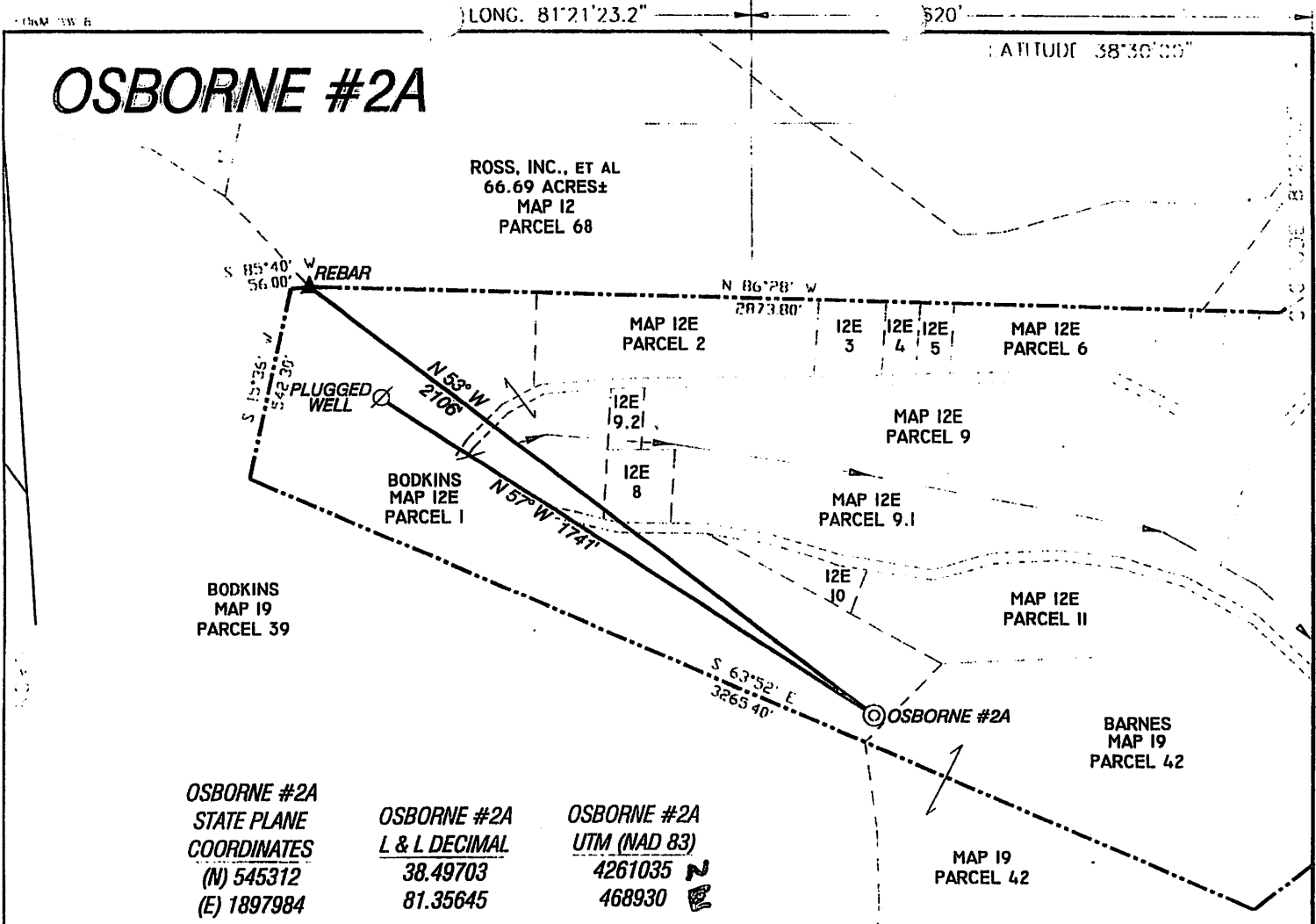
Office of Oil and Gas  
WV Dept. of Environmental Protection

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CAUTION: 58-50-00

Office of Oil and Gas  
WV Dept. of Environmental Protection





NOTES

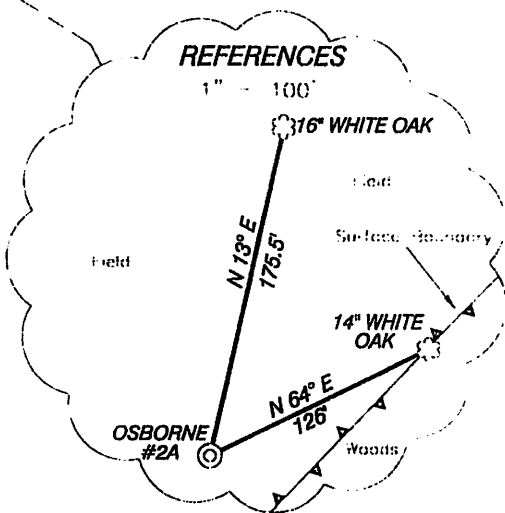
TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD 83.

TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 11-28-12.

LEASE BOUNDARY SHOWN HEREON TAKEN FROM A LEGAL DESCRIPTION PROVIDED BY RAVEN RIDGE ENERGY, LLC.

SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF KANAWHA COUNTY IN MAY, 2012 AND INFORMATION PROVIDED BY RAVEN RIDGE ENERGY, LLC.

WELL 1A1 / LONG. ESTABLISHED BY DGPS (SUBMETER MAPPING GRADE)



I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAN IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND ENFORCED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

*[Signature]*  
HUPP Surveying & Mapping  
P.O. Box 647 Grantsville, WV 26147  
(304) 354-7035 EMAIL: hupp@frontiernet.net

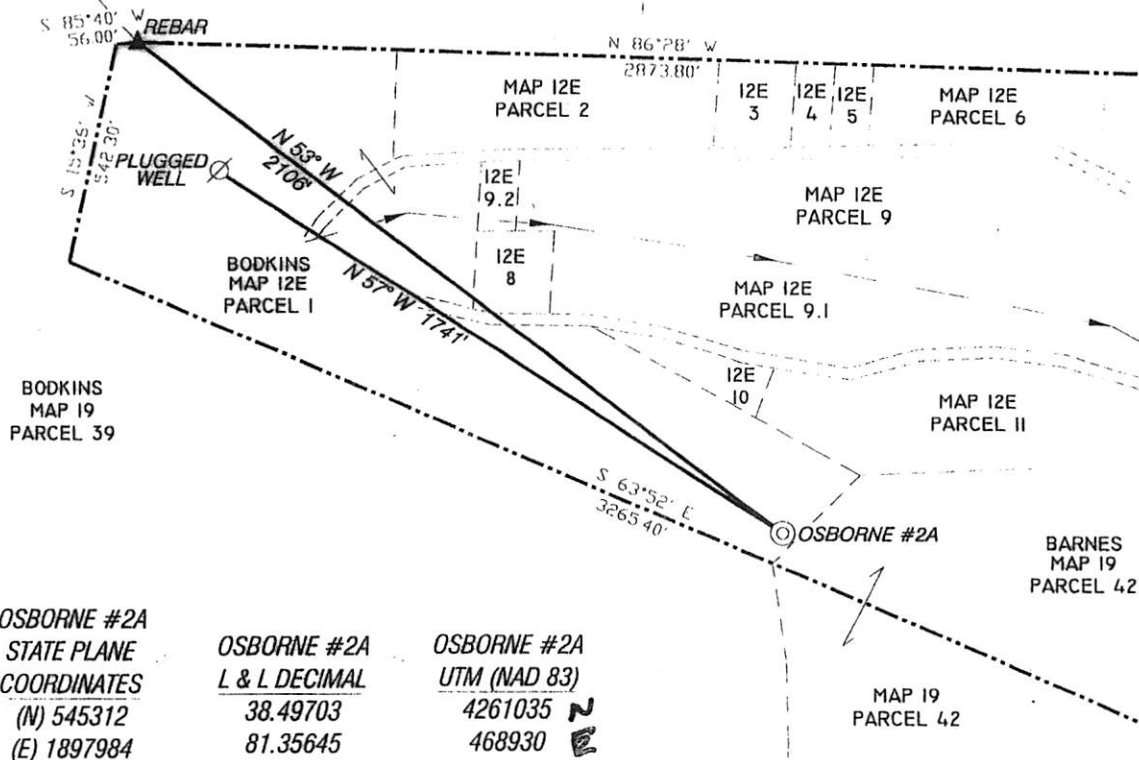
DOYLE HUPP, JR.  
LICENSED  
No. 854  
STATE OF WEST VIRGINIA  
PROFESSIONAL SURVEYOR

(+) DENOTES LOCATION OF WELL ON U.S. STATES TOPOGRAPHIC MAPS  
DATE NOVEMBER 28, 2010  
OPERATORS WELL NO. OSBORNE #2A  
API WELL NO. 47-039-063488  
STATE COUNTY

MINIMUM DIAMETER OF ACCURACY	1/200	FILE NO. W2143 (BK 63-8)	SCALE 1" = 100'	STATE OF WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION OFFICE OF OIL AND GAS
KNOWN SOURCE OF ELEVATION	DGPS (SUBMETER GRADE)			
WELL TYPE: <input checked="" type="checkbox"/> OIL <input checked="" type="checkbox"/> GAS <input type="checkbox"/> LIQUID INJECTION <input type="checkbox"/> WASTE DISPOSAL <input type="checkbox"/> IF "GAS" PRODUCTION <input checked="" type="checkbox"/> STORAGE <input type="checkbox"/> DEEP <input type="checkbox"/> SHALLOW <input checked="" type="checkbox"/>				
LOCATION: VALLEY 846' WATERSHED SAND BRANCH OF BIG SANDY CREEK				
DISTRICT BIG SANDY COUNTY KANAWHA QUADRANGLE (CLINTON 7 E)				
SURFACE OWNER DANIEL & LAURA BODKINS ACRES 25.861				
ROYALTY OWNER ALVIN ENGELKE-AGENT, et al LEASE ACRES 124.81				
PROPOSED WORK: LEASE NO.				
DRILL <input checked="" type="checkbox"/> CONVERT <input type="checkbox"/> DRILL DEEPER <input type="checkbox"/> REDRILL <input type="checkbox"/> FRACTURE OR STIMULATE <input checked="" type="checkbox"/> PLUG OFF OLD FORMATION <input type="checkbox"/> PERFORATE NEW FORMATION <input type="checkbox"/> PLUG AND ABANDON <input type="checkbox"/> CLEAN OUT AND REPLUG <input type="checkbox"/> OTHER				
PHYSICAL CHANGE IN WELL (SPECIFY) TARGET FORMATION BEREA ESTIMATED DEPTH 3,000'				
WELL OPERATOR RAVEN RIDGE ENERGY, LLC. DESIGNATED AGENT RYAN CUNNINGHAM				
ADDRESS 3230 PENNSYLVANIA AVE. CHARLESTON, WV 25302 ADDRESS 3230 PENNSYLVANIA AVE. CHARLESTON, WV 25302				

**OSBORNE #2A**

ROSS, INC., ET AL  
66.69 ACRES±  
MAP 12  
PARCEL 68

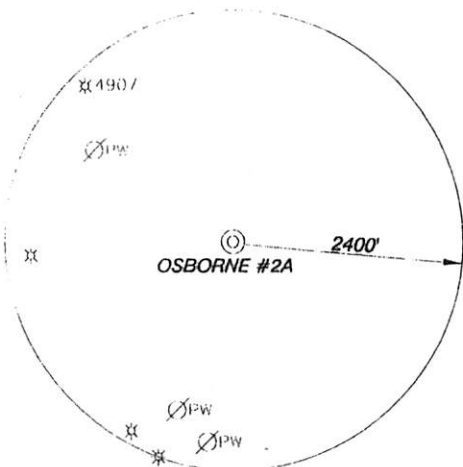


OSBORNE #2A  
STATE PLANE  
COORDINATES  
(N) 545312  
(E) 1897984

OSBORNE #2A  
L & L DECIMAL  
38.49703  
81.35645

OSBORNE #2A  
UTM (NAD 83)  
4261035  
468930

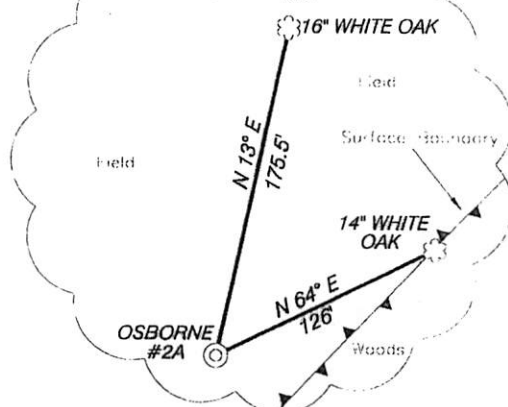
N  
E

**NOTES**

TIES TO WELLS AND CORNERS ARE BASED ON STATE PLANE GRID NORTH WV SOUTH ZONE NAD '27.  
TIES TO REFERENCES ARE BASED ON MAGNETIC NORTH 11-28-12.  
LEASE BOUNDARY SHOWN HEREON TAKEN FROM A LEGAL DESCRIPTION PROVIDED BY RAVEN RIDGE ENERGY, LLC.  
SURFACE OWNER AND ADJOINER INFORMATION TAKEN FROM THE ASSESSOR AND COUNTY CLERK RECORDS OF KANAWHA COUNTY IN MAY, 2012 AND INFORMATION PROVIDED BY RAVEN RIDGE ENERGY, LLC.  
WELL TAIL/LOG. ESTABLISHED BY DGPS(SUBMETER MAPPING GRADE).

**REFERENCES**

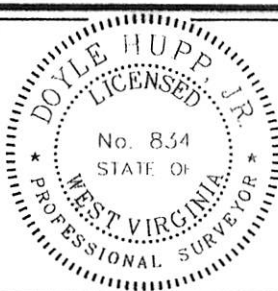
1" = 100'



I, THE UNDERSIGNED, HEREBY CERTIFY THAT THIS PLAT IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND SHOWS ALL THE INFORMATION REQUIRED BY LAW AND THE REGULATIONS ISSUED AND PRESCRIBED BY THE DIVISION OF ENVIRONMENTAL PROTECTION.

DATE  
8.34

HUPP Surveying & Mapping  
P.O. Box 647 Grantsville, WV 26147  
(304) 354-7035 EMAIL: hupp@frontiernet.net



(+) DENOTES LOCATION OF WELL ON UNITED STATES TOPOGRAPHIC MAPS

DATE NOVEMBER 28, 2010  
OPERATORS WELL NO. OSBORNE #2A

API WELL NO. 47-039-06348R  
STATE COUNTY WV

MINIMUM DI GRI  
OF ACCURACY 1/200 FILE NO. W2143 (BK 63-8)  
FROM SOURCE SCALE 1" = 100'  
OF ELEVATION DGPS (SUBMETER GRADE)

STATE OF WEST VIRGINIA  
DIVISION OF ENVIRONMENTAL PROTECTION  
OFFICE OF OIL AND GAS



WELL TYPE: OIL ☒ GAS ☐ LIQUID INJECTION ☐ WASTE DISPOSAL ☐ IF "GAS" PRODUCTION ☒ STORAGE ☐ DEEP ☐ SHALLOW ☒  
LOCATION: VA. ON 846' WATERSHED SAND BRANCH OF BIG SANDY CREEK  
DISTRICT BIG SANDY COUNTY KANAWHA QUADRANGLE CLENDENIN  
SURFACE OWNER DANIEL & LAURA BODKINS ACREAGE 23.861  
ROYALTY OWNER ALVIN ENGELKE - AGENT, et al LEASE ACREAGE 124.81  
PROPOSED WORK: DRILL ☒ CONVERT ☐ DRILL DEEPER ☐ REDRILL ☐ FRACTURE OR STIMULATION ☒ PLUG OFF OLD FORMATION ☐ PERFORATE NEW FORMATION ☐ PLUG AND ABANDON ☐ CLEAN OUT AND REPLUG ☐ OTHER  
PHYSICAL CHANGE IN WELL (SPECIFY) TARGET FORMATION BEREA  
ESTIMATED DEPTH 3,000'

WELL OPERATOR RAVEN RIDGE ENERGY, LLC. DESIGNATED AGENT RYAN CUNNINGHAM  
ADDRESS 3230 PENNSYLVANIA AVE. CHARLESTON, WV 25302 ADDRESS 3230 PENNSYLVANIA AVE. CHARLESTON, WV 25302

39 06348R

Nottingham, Justin E

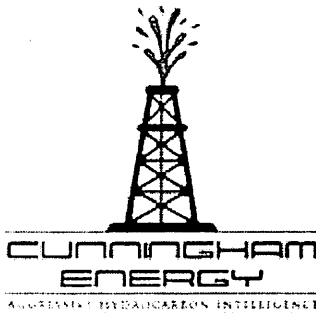
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**From:** Danielle Boggs <dani.bays@cunninghamenergy.com>  
**Sent:** Monday, November 25, 2013 9:06 AM  
**To:** Nottingham, Justin E  
**Subject:** Osborne 2A/47-3906348  
**Attachments:** SKMBT\_C35131125082800.pdf

Please see attached re-permit for 47-3906348.

I will forward an original Mylar.

Thank you,  
*Danielle N. Boggs*  
*Cunningham Energy*  
3230 Pennsylvania Ave  
Charleston, WV 25302  
Direct: (304) 344-9291  
Cell: (304) 553-5850  
Fax: (304) 344-9290  
[www.cunninghamenergy.com](http://www.cunninghamenergy.com)



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**Received**  
NOV 25 2013  
Office of Oil and Gas  
WV Dept. of Environmental Protection